

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 Listing of Claims:

1. (Original) A lane device for detecting the lane of a vehicle (10, 11, 12), the lane device (30) having evaluation means (32, 34, 37) for evaluating distance data (60, 61, 66) of at least one distance sensor (58, 59, 65), the
10 distance data (60, 61, 66) containing information about a distance (d1-d4) from a reference body (62, 64) which runs essentially continuously to the side of the lane, at least in sections, and the evaluation means (32, 35, 37) being configured to acquire lane data (36) as a function of the distance data (60, 61, 66), characterized in that the evaluation means (32, 35, 37) filter out interference
15 information, caused in particular by vehicles (17) present in the region of the lane or discontinuities (63) of the reference body (62, 64), from the distance data (60, 61, 66), the lane data (36) being acquired as a function of the filtered distance data (60, 61, 66).

20 2. (Original) The lane device as claimed in claim 1, characterized in that it contains at least one high pass filter and/or at least one low pass filter (31) for filtering the distance data (60, 61, 66).

25 3. (Currently Amended) The lane device as claimed in claim 1 or 2, characterized in that it carries out plausibility checking for the filtering of the distance data

30 4. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the evaluation means (32, 35, 37) compare the lane data (36) and/or the distance data (60, 61, 66) with stored lane data (45).

5. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the distance sensor (58, 59, 65) operates in a range of invisible or inaudible frequencies.

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6. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the at least one distance sensor (58, 59, 65) is an ultrasonic sensor, a radar sensor or an infrared sensor.

10 7. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that it can be activated, or activates itself, when there is an operative failure of a wirefree locating system, in particular of an GPS system (41), and/or where there is an operative failure of an optical detection system (40).

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8. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the at least one distance sensor (58, 59, 65) forms a component of the lane device (30).

20 9. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the at least one distance sensor (58, 59, 65) forms a component of a parking aid device (28).

25 10. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that it evaluates the distance data (60, 61, 66) of the at least one distance sensor (58, 59, 65) as a function of the velocity (v) of the vehicle (10, 11, 12).

30 11. (Currently Amended) The lane device as claimed in ~~one of the preceding claims~~ claim 1, characterized in that it evaluates, and in particular

weights, the distance data (60, 61, 66) as a function of the position of the at least one distance sensor (58, 59, 65) on the vehicle (10, 11, 12).

12. (Currently Amended) The lane device as claimed in ~~one of~~
5 ~~the preceding claims~~ claim 1, characterized in that it is configured to perform a transverse control of the vehicle (10, 11, 12), in particular to generate a steering intervention in the vehicle (10, 11, 12).

13. (Currently Amended) A selector device for interaction with a
10 parking aid device (28) and with a lane device (30) as claimed in ~~one of the~~
~~preceding claims~~ claim 1, having selection means for selecting the distance data (60, 61, 66) of the at least one distance sensor (58, 59, 65) as a function of the velocity of the vehicle (10, 11, 12) for the parking aid device (28) and/or for the lane device (30).

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14. (Original) The selector device as claimed in claim 13,
characterized in that the selection means is configured to make a direction-
dependent selection of the distance data (60, 61, 66) of at least two distance
sensors (58, 59, 65) as a function of their position on the vehicle (10, 11, 12).

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15. (Currently Amended) The selector device as claimed in
claim 13 ~~or 14~~, characterized in that it forms a component of the lane device (30)
or of the parking aid device (28).

25 16. (Currently Amended) The lane device as claimed in ~~one of~~
~~claims 1 to 12 or selector device as claimed in one of claims 13 to 15~~ claim 1,
characterized in that it has program code which can be executed by a processor
(25).

30 17. (Currently Amended) A storage means having a lane device
~~and/or a selector device~~ as claimed in claim 16.

18. (Currently Amended) A vehicle, in particular a passenger car, characterized in that it has a lane device (30) as claimed in claim 1 ~~one of claims 1 to 12 or 16, or a selector device (29) as claimed in one of claims 13 to 16, and/or a storage means as claimed in claim 17.~~

19. (Currently Amended) A use of a distance sensor (58, 59, 65) which is a component of a parking aid device which is arranged in a vehicle (10), for providing distance data (60, 61, 66) which is fed to a lane device (30) as claimed in ~~one of the preceding claims~~ claim 1 which is also arranged in the vehicle (10), the lane device (30) acquiring lane data (36) from this distance data (60, 61, 66) in order to determine a lane (15) along which the vehicle (10) is guided.

20. (Original) A method for detecting the lane of a vehicle (10, 11, 12), having the following steps: evaluation of distance data (60, 61, 66) of at least one distance sensor (58, 59, 65), the distance data (60, 61, 66) containing information about a distance (d1-d4) from a reference body (62, 64) which runs essentially continuously to the side of the lane, at least in sections, and acquisition of lane data (36) as a function of the distance data (60, 61, 66), characterized in that interference information, caused by vehicles (17) present in the region of the lane or discontinuities (63) of the reference body (62, 64), are filtered out from the distance data (60, 61, 66), the lane data (36) being acquired as a function of the filtered distance data (60, 61, 66).

21. (New) The selector device as claimed in claim 13, characterized in that it has program code which can be executed by a processor (25).

22. (New) A storage means having a selector device as claimed in claim 21.

23. (New) A vehicle, in particular a passenger car, characterized in that it has a selector device (29) as claimed in claim 13

24. (New) A vehicle, in particular a passenger car, characterized in
5 that it has a storage means as claimed in claim 22.